



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/558,446

05/31/2007

Catherine A. L. Maris

L0009/US

4655

30522 7590 06/24/2009

KRATON POLYMERS U.S. LLC

16400 Park Row

HOUSTON, TX 77084

EXAMINER

MULLIS, JEFFREY C

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

06/24/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

kratonip@kraton.com

Office Action Summary	Application No. 10/558,446	Applicant(s) MARIS ET AL.	
	Examiner Jeffrey C. Mullis	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10-19-07; 11-28-05</u> | 6) <input type="checkbox"/> Other: _____ |

Claims 8-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear if the “one or more fillers and filler deactivators” may encompass for instance only two fillers or encompass only two deactivators in that the claims can be interpreted as requiring both fillers or activators or only one.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Modic (US 5,969,034).

Patentees disclose a composition for overmolding onto a polar substrate such as that for a tool handle comprising a hydrogenated styrene diene styrene block copolymer and a grafted EPDM (abstract, column 4, lines 12-20). Note Tables 1-3 for use of Kraton G polymers. Note also that the instant specification discloses that Kraton G polymers may be used (paragraph 43 of applicants published specification) and therefore applicants SBC characteristics reasonably appear to be inherent in those

Art Unit: 1796

SBC's of the reference which also uses Kraton G polymers. Note that Table 2 discloses mixtures of styrenic block copolymers wherein one of the styrenic block copolymers is SEBS grafted with 1.7 maleic anhydride as in applicants functionalized polyolefin.

When the reference discloses all the limitations of a claim except a property or function, and the Examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention, basis exists for shifting the burden of proof to applicant. Note In re Fitzgerald et al. 619 F. 2d 67, 70, 205 USPQ 594, 596, (CCPA 1980). See MPEP § 2112-2112.02.

Claims 8-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Modic (US 5,969,034) in view of De Keyzer et al. (US 6,465,557) and Prost (US 4,283,809).

Arguably, applicants MFR's and 1,2 vinyl content is not inherent in the primary reference and nylon substrates are not disclosed. Note however that low viscosity during processing is desirable at column 2, lines 2-10.

De Keyzer discloses that viscosity of SBC's drop with rising vinyl content and lowest viscosity occurs for vinyl contents of 70-80% at column 2, lines 57-67.

Prost discloses that suitable materials for tool handles include nylon at column 2, lines 45-55.

Art Unit: 1796

It would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention to use nylon for the tool handle of the primary reference (which is overmolded in the primary reference) motivated by the need for a specific material suitable for a tool handle as used by the primary reference and by Prost's disclosure that nylon is suitable absent any showing of surprising or unexpected results.

To use the vinyl content of De Keyzer in the block copolymers of Modic would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention in order to beneficially reduce viscosity (and which varies inversely with melt flow) absent any showing of surprising or unexpected results.

Claims 8-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata et al. (US 5,191,024) in view of Huff (US 5,160,474).

Patentees disclose a composition which may containing a hydrogenated ABA styrenic block copolymer in which the diene block is more than 60% vinyl functional (abstract). The block copolymers may include mixtures of modified (as in applicants components "b") and unmodified block copolymers at column 2, lines 26-35. The MFR's encompass those of the instant claims at column 4, lines 11-17. Grafted ethylene propylene rubber may be added at column 13, lines 43-45 in an amount of 0.1-100 parts by weight based on 100 parts SBC at column 13, lines 25-30. The material has especially good properties for automotive parts at column 42, lines 1-5.

Overmolding on polar substrates such as polyamide is not disclosed by the primary reference.

Art Unit: 1796

Huff discloses overmolding of an elastomer onto a nylon automotive radiator at column 1, lines 5-20.

It would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention to overmold the material of the primary reference onto a nylon automotive as taught by the secondary reference, motivated by the desire of the primary reference to create automotive parts from the materials disclosed and by the disclosure of the secondary reference of details for accomplishing this goal absent any showing of surprising or unexpected results.

Claims 8-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakashima et al. (US 6,576,691)

Patentees disclose a molding resin containing olefin polymers and conjugated diene polymers (abstract) in which the conjugated diene polymers may be ABA block copolymers having applicants vinyl content (Table 1 in column 10). The olefin polymers may be modified or unmodified and have a MFR of up to 100 g/10 min at column 6, lines 26- column 7 line 15. Note claim 5 of the patent for addition of aramide fibers and as the fibers would be molded in the resin, they can be viewed as overmolded.

There are no actual examples in which all of applicants materials are present in combination. However it would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention to arrive at applicants invention by selecting from the various disclosures of the reference in the expectation of adequate results absent any showing or surprising or unexpected results.

Art Unit: 1796

Ueda et al, cited of interest discloses that YUMEX 1001 has applicants grafting level at paragraph 91 while Kashiwabara (US 2007/0104887) discloses that YUMEX has a molecular weight of 40,000 at paragraph 76..

Any inquiry concerning this communication should be directed to Jeffrey C. Mullis
M-F, 9-5 pm at telephone number 571 272 1075.

Jeffrey C. Mullis
Primary Examiner
Art Unit 1796

JCM

6-14-09

/Jeffrey C. Mullis/

Primary Examiner, Art Unit 1796